

FACT SHEET

South Fork Flathead Watershed Westslope Cutthroat Trout Conservation Program

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Montana Fish, Wildlife & Parks, Bonneville Power Administration, U. S. Forest Service

WHY WE'RE DOING THE PROJECT: The primary purpose of the project is to conserve native westslope cutthroat trout in the South Fork of the Flathead River. The genetics of these cutthroats are threatened by hybrid trout living in lakes at the headwaters of tributary streams. The goal is to replace the hybrids with pure westslope cutthroat trout. The South Fork is the major stronghold of westslope cutthroat trout within its native range. This is one of the very few instances where threats from wild populations of non-native fish can be reduced or eliminated. The project has been in the planning stages for years and was approved last year after an FWP environmental assessment and a federal environmental impact statement developed by Bonneville Power Administration (BPA) and the Flathead National Forest. The project is funded by BPA through its resident fish mitigation program.

DESCRIPTION OF THE PROJECT: Over a 10-year period, the project will treat up to 21 high mountain lakes in late fall with rotenone or other fish toxicants to remove nonnative trout and their offspring so they won't hybridize with westslope cutthroat trout. Rainbow trout and Yellowstone cutthroat trout readily hybridize with native westslope cutthroat and produce fertile hybrids that produce more young. This project is a fishery replacement project, not a fishery removal project. When a fishery is eliminated, a new fishery using genetically pure westslope cutthroat will be quickly re-established. "Swamping" or over-planting genetically pure cutthroat in lakes with hybrids, has seen limited success in some lakes. We will continue to monitor the level of hybridization in the candidate lakes and investigate continued swamping to rehabilitate some lakes without using toxicants.

EXTENT OF THE PROBLEM: Of 350 or so lakes in this watershed, 50 support fish populations. Of these 50 lakes, 21 have been determined to have hybrid populations that threaten westslope cutthroat trout. These 21 lakes potentially allow the spread of undesirable fish to the entire watershed. All 21 lakes are on public lands; 11 of the lakes are in the Bob Marshall Wilderness Area, 8 lakes are in the Jewel Basin Area, and two are located elsewhere in the Flathead National Forest.

TOXICANTS: Rotenone is commonly used in fish management actions to remove unwanted fish populations, including wilderness and special use areas. This technique has been successfully used in the past to rehabilitate five Jewel Basin lakes and one lake within the Bob Marshall Wilderness. Since 1948, 132 Lakes have been successfully treated in Region 1.

A few facts about rotenone:

- Rotenone is an organic compound derived from certain plants in the pea family
- Rotenone works by disrupting cell function. It will affect all gill breathing organisms. At the concentrations used, rotenone will have low impacts on amphibians and will not affect birds and mammals.
- Rotenone quickly breaks down naturally to harmless organic compounds within a few months. The rate of breakdown depends on environmental conditions such as temperature, sunlight, and water flow. Rotenone is used in some common garden insecticides and is used by people in South America to gather fish to eat.

DISTRIBUTION OF EFFORT: Only one or two lakes will be treated each year for the next ten years or so. To the extent possible we will also minimize the number of lakes treated in any drainage in any given year. Each drainage will maintain some lake fishing opportunities throughout the treatment period.

LAKE TREATMENTS SCHEDULED FOR 2007: Early in October 2007, Black Lake and Blackfoot Lake will be the first South Fork Project lakes to be treated with rotenone to kill hybrid trout. These lakes are located in the Graves Creek drainage of the South Fork Flathead watershed (Jewel Basin). Treatment will take three days at each lake (6 days total). Both lakes will be restocked as soon as possible the following spring with genetically pure westslope cutthroat trout. Monitoring and evaluation of treatment effects will begin as soon as treatments are completed. Some trail restrictions may be in effect in October during the treatment activities.

MONITORING AND EVALUATION: All treated lakes will be evaluated for reestablishment of plankton, insect, and amphibian populations. Fisheries will be monitored for success in re-establishment and growth rates of fish. The entire program will be constantly evaluated for success and adjusted for best efficiency with least impact to recreational users. A formal reevaluation of the program will occur 5 years into the project to determine whether or not to proceed further, although monitoring and evaluation will be ongoing at all times as treatments proceed.

For more information, contact FWP at 752-5501.